

OIB - HU-25C Guardian 07/21/16 Science Report

Aircraft:

[HU-25A Guardian #525](#) ([See full schedule](#))

Date:

Thursday, July 21, 2016

Mission:

OIB

Mission Location:

Arctic Ocean

Mission Summary:**OIB SF 06: South East Beaufort**

IceBridge flew the last line of the sea ice campaign northward from the ice edge along the 140W longitude line in the south east Beaufort Sea region. The line was designed to extend coverage towards the eastern edge of the Falcon range limit and potentially survey areas of multi-year ice. The line also passed over an undersea mooring from the Beaufort Gyre Experiment.

The ATM Applanix system showed an IMU failure about half an hour into the flight, though it is unknown at this time if the data itself were affected, the DMS system can be used as a backup if needed. Upon descent to the line we ran into a layer of haze, but it was patchy and thin enough to obtain good DMS and ATM data throughout much of the line until just before 79N latitude (for about 400 km of data). As the clouds were much thicker in this region we turned to the southwest towards Barrow to extend our data collection area slightly into the area of thinner and more patchy clouds. Ice conditions along the survey line were again different to those encountered over the western lines of the campaign with fewer melt ponds and a larger area of snow-covered ice observed.

Overall, it was a successful flight to end the campaign.

Data volume

ATM: 6.0 Gb

FLIR: 5 Gb

DMS: 13.8 Gb, 2910 frames

Data on at 20:57, Data off at 21:10

Submitted by:

Nathan T. Kurtz on 07/21/16

Related Flight Report:

HU-25A Guardian #524 07/21/16

Flight Number:

OIB 2016 on HU25A #10

Payload Configuration:

ATM and DMS

Nav Data Collected:

No

Total Flight Time:

3.6 hours

Submitted by:

Taylor Thorson on 08/01/16

Flight Segments:

From:	PABR	To:	PABR
Start:	07/21/16 19:54 Z	Finish:	07/21/16 23:30 Z
Flight Time:	3.6 hours		
Log Number:	16F003	PI:	Nathan Kurtz
Funding Source:	Thomas Wagner - NASA - SMD - ESD Cryosphere & International Polar Year		
Purpose of Flight:	Science		

Flight Hour Summary:

16F003

Flight Hours Approved in SOFRS					121.25
Total Used					126.9
Total Remaining					-5.65
16F003 Flight Reports					
Date	Flt #	Purpose of Flight	Duration	Running Total	Hours Remaining
06/29/16	OIB 2016 on HU25A ICF	Science	2	2	119.25
07/11/16	OIB 2016 on HU25A #1	Ferry	2.6	4.6	116.65
07/11/16	OIB 2016 on HU25A #2	Ferry	2.5	7.1	114.15
07/11/16 - 07/12/16	OIB 2016 on HU25A #3	Ferry	2.2	9.3	111.95
07/12/16 - 07/13/16	OIB 2016 on HU25A #4	Ferry	2.6	11.9	109.35
07/13/16	OIB 2016 on HU25A #5	Science	3.4	15.3	105.95
07/14/16	OIB 2016 on HU25A #6	Science	3.5	18.8	102.45
07/15/16	OIB 2016 on HU25A #7	Science	3.7	22.5	98.75
07/19/16 - 07/20/16	OIB 2016 on HU25A #8	Science	3.6	26.1	95.15
07/20/16	OIB 2016 on HU25A #9	Science	3.4	29.5	91.75
07/21/16	OIB 2016 on HU25A #10	Science	3.6	33.1	88.15
07/22/16	OIB 2016 on HU25A #11	Ferry	3.9	37	84.25
07/22/16	OIB 2016 on HU25A #12	Ferry	3.2	40.2	81.05
07/22/16	OIB 2016 on HU25A #13	Ferry	2.1	42.3	78.95
08/23/16	OIB 2016 on HU-25 #14	Science	2.3	44.6	76.65
08/25/16	OIB 2016 on HU-25 #15	Ferry	3.2	47.8	73.45
08/25/16	OIB 2016 on HU-25 #16	Ferry	2.2	50	71.25
08/27/16	OIB 2016 on HU-25 #17	Science	3.7	53.7	67.55
08/29/16	OIB 2016 on HU-25 #18	Science	3.8	57.5	63.75
08/29/16	OIB 2016 on HU-25 #19	Science	3.5	61	60.25
09/01/16	OIB 2016 on HU-25 #20	Science	3.4	64.4	56.85
09/02/16	OIB 2016 on HU-25 #21	Science	3.8	68.2	53.05
09/02/16	OIB 2016 on HU-25 #22	Science	3.8	72	49.25
09/05/16	OIB 2016 on HU-25 #23	Science	0.6	72.6	48.65
09/06/16	OIB 2016 on HU-25 #24	Science	3.5	76.1	45.15

09/09/16	OIB 2016 on HU-25 #25	Science	3.5	79.6	41.65
09/09/16	OIB 2016 on HU-25 #26	Science	3.5	83.1	38.15
09/10/16	OIB 2016 on HU-25 #27	Science	3	86.1	35.15
09/11/16	OIB 2016 on HU-25 #28	Science	3.9	90	31.25
09/11/16	OIB 2016 on HU-25 #29	Science	3.7	93.7	27.55
09/12/16	OIB 2016 on HU-25 #30	Science	3.3	97	24.25
09/12/16	OIB 2016 on HU-25 #31	Science	2.7	99.7	21.55
09/13/16	OIB 2016 on HU-25 #32	Science	4	103.7	17.55
09/13/16	OIB 2016 on HU-25 #33	Science	2.9	106.6	14.65
09/15/16	OIB 2016 on HU-25 #34	Science	3.7	110.3	10.95
09/16/16	OIB 2016 on HU-25 #35	Ferry	2.4	112.7	8.55
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	114.4	6.85
09/16/16	OIB 2016 on HU-25 #35	Ferry	1.7	116.1	5.15
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.8	118.9	2.35
09/17/16	OIB 2016 on HU-25 #38	Ferry	2.9	121.8	-0.55
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.5	124.3	-3.05
09/19/16	OIB 2016 on HU-25 #40	Ferry	2.6	126.9	-5.65

Flight Reports began being entered into this system as of 2012 flights. If there were flights flown under an earlier log number the flight reports are not available online.

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